Claims

1. Oil-based suspension concentrates composed of

- at least one room-temperature-solid active agrochemical substance,
- at least one "closed" penetrant,
- at least one vegetable oil or mineral oil,
- at least one nonionic surfactant and/or at least one anionic surfactant, and
- optionally one or more additives from the groups of the emulsifiers, foam inhibitors, preservatives, antioxidants, colorants and/or inert filler materials.

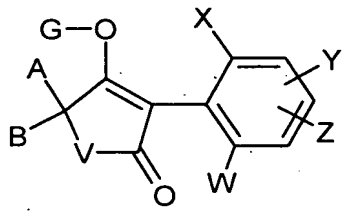
2. Suspension concentrates according to Claim 1, characterized in that a fungicide, bactericide, insecticide, acaricide, nematicide, molluscicide, herbicide, plant growth regulator, plant nutrient and/or repellant is present as active agrochemical substance.

3. Suspension concentrates according to Claim 1, characterized in that imidacloprid, thiacloprid, acetamiprid, nitenpyram, clothianidin, thiamethoxam or dinotefuran is present as active agrochemical substance.

4. Suspension concentrates according to Claim 1, characterized in that 1H-pyrazole-5-carboxamide,3-bromo-N-[4-cyano-2-methyl-6-[(methyl-amino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl) (9CI); 1H-pyrazole-5-carboxamide,N-4-cyano-2-methyl-6-[(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl) (9CI); 1H-pyrazole-5-carbox-amide,3-bromo-N-[4-chloro-2-methyl-6-[(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl) (9CI) or 1H-pyrazole-5-carboxamide,N-[4-chloro-2-

methyl-6-[[(1-methylethyl)amino]carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl) (9CI) is present as active agrochemical substance.

5. Suspension concentrates according to Claim 1, characterized in that as agrochemical active substances the compounds of the formula (I') are present



(I')

in which

V is oxygen or N-D,

X is halogen, alkyl, alkoxy, haloalkyl, haloalkoxy or cyano,

W, Y and Z independently of one another are hydrogen, halogen, alkyl, alkoxy, haloalkyl, haloalkoxy or cyano,

A is hydrogen, in each case optionally halogen-substituted alkyl, alkoxyalkyl, saturated, optionally substituted cycloalkyl, in which optionally at least one ring atom is replaced by a heteroatom,

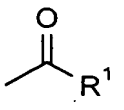
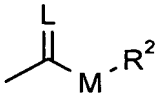
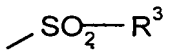
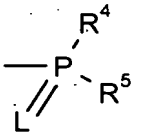
B is hydrogen or alkyl,

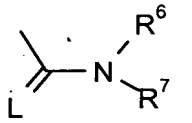
A and B together with the carbon atom to which they are attached are a saturated or unsaturated, unsubstituted or substituted ring optionally including at least one heteroatom,

D is hydrogen or an optionally substituted radical from the series alkyl, alkenyl, alkoxyalkyl, saturated cycloalkyl, in which optionally one or more ring members are replaced by heteroatoms,

A and D together with the atoms to which they are attached are a saturated or unsaturated ring which optionally includes at least one heteroatom and is unsubstituted or substituted in the A,D moiety,

G is hydrogen (a) or is one of the groups

 (b),  (c),  (d),  (e),

E (f) or  (g),

in which

E is a metal ion or an ammonium ion,

L is oxygen or sulphur,

M is oxygen or sulphur,

R^1 is in each case optionally halogen-substituted alkyl, alkenyl, alkoxyalkyl, alkylthioalkyl, polyalkoxyalkyl or optionally halogen-, alkyl- or alkoxy-substituted cycloalkyl which may be interrupted by at least one heteroatom, or in each case optionally substituted phenyl, phenylalkyl, hetaryl, phenoxyalkyl or hetaryloxyalkyl,

R^2 is in each case optionally halogen-substituted alkyl, alkenyl, alkoxyalkyl, polyalkoxyalkyl or is in each case optionally substituted cycloalkyl, phenyl or benzyl,

R^3 is optionally halogen-substituted alkyl or optionally substituted phenyl,

R^4 and R^5 independently of one another are in each case optionally halogen-substituted alkyl, alkoxy, alkylamino, dialkylamino, alkylthio, alkenylthio, cycloalkylthio or are in each case optionally substituted phenyl, benzyl, phenoxy or phenylthio, and

R^6 and R^7 independently of one another are hydrogen, in each case optionally halogen-substituted alkyl, cycloalkyl, alkenyl, alkoxy, alkoxyalkyl, are optionally substituted phenyl, are optionally substituted benzyl or together with the nitrogen atom to which they are attached are an optionally oxygen- or sulphur-interrupted optionally substituted ring.

6. Suspension concentrates according to Claim 1, comprising compounds of the formula (I') in which

V is oxygen or N-D,

W is hydrogen, C_1-C_4-alkyl, C_1-C_4-alkoxy, chlorine, bromine or fluorine,

X is C_1-C_4-alkyl, C_1-C_4-alkoxy, C_1-C_4-haloalkyl, fluorine, chlorine or bromine,

Y and Z are independently of one another hydrogen, C_1-C_4-alkyl, halogen, C_1-C_4-alkoxy or C_1-C_4-haloalkyl,

A is hydrogen or in each case optionally halogen-substituted C_1-C_6-alkyl or C_3-C_8-cycloalkyl,

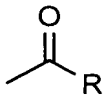
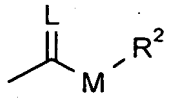
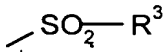
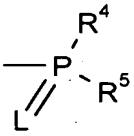
B is hydrogen, methyl or ethyl,

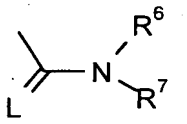
A, B and the carbon atom to which they are attached are saturated C_3-C_6-cycloalkyl, in which optionally a ring member is replaced by oxygen or sulphur, and which is optionally mono- or disubstituted by C_1-C_4-alkyl, trifluoromethyl or C_1-C_4-alkoxy,

D is hydrogen, in each case optionally fluorine- or chlorine-substituted C_1-C_6-alkyl, C_3-C_4-alkenyl or C_3-C_6-cycloalkyl,

A and D are together in each case optionally methyl-substituted C_3-C_4-alkanediyl, in which optionally a methylene group is replaced by sulphur,

G is hydrogen (a) or is one of the groups

 (b),  (c),  (d),  (e),

E (f) or  (g),

in which

E is a metal ion or an ammonium ion,

L is oxygen or sulphur and

M is oxygen or sulphur,

R^1 is in each case optionally halogen-substituted C_1-C_{10}-alkyl, C_2-C_{10}-alkenyl, C_1-C_4-alkoxy-C_1-C_4-alkyl, C_1-C_4-alkylthio-C_1-C_4-

alkyl or optionally fluorine-, chlorine-, C_1-C_4-alkyl- or C_1-C_2-alkoxy-substituted C_3-C_6-cycloalkyl,

is optionally fluorine-, chlorine-, bromine-, cyano-, nitro-, C_1-C_4-alkyl-, C_1-C_4-alkoxy-, trifluoromethyl- or trifluoromethoxy-substituted phenyl,

is in each case optionally chlorine- or methyl-substituted pyridyl or thienyl,

R^2 is in each case optionally fluorine- or chlorine-substituted C_1-C_{10}-alkyl, C_2-C_{10}-alkenyl, C_1-C_4-alkoxy-C_2-C_4-alkyl,

is optionally methyl- or methoxy-substituted C_5-C_6-cycloalkyl or

is in each case optionally fluorine-, chlorine-, bromine-, cyano-, nitro-, C_1-C_4-alkyl-, C_1-C_4-alkoxy-, trifluoromethyl- or trifluoromethoxy-substituted phenyl or benzyl,

R^3 is optionally fluorine-substituted C_1-C_4-alkyl or is optionally fluorine-, chlorine-, bromine-, C_1-C_4-alkyl-, C_1-C_4-alkoxy-, trifluoromethyl-, trifluoromethoxy-, cyano- or nitro-substituted phenyl,

R^4 is in each case optionally fluorine- or chlorine-substituted C_1-C_4-alkyl, C_1-C_4-alkoxy, C_1-C_4-alkylamino, C_1-C_4-alkylthio or is in each case optionally fluorine-, chlorine-, bromine-, nitro-, cyano-, C_1-C_4-alkoxy-, trifluoromethoxy-, C_1-C_4-alkylthio-, C_1-C_4-haloalkylthio-, C_1-C_4-alkyl- or trifluoromethyl-substituted phenyl, phenoxy or phenylthio,

R^5 is C_1-C_4-alkoxy or C_1-C_4-thioalkyl,

R^6 is C_1-C_6-alkyl, C_3-C_6-cycloalkyl, C_1-C_6-alkoxy, C_3-C_6-alkenyl, C_1-C_4-alkoxy-C_1-C_4-alkyl,

R^7 is C_1-C_6-alkyl, C_3-C_6-alkenyl or C_1-C_4-alkoxy-C_1-C_4-alkyl,

R^6 and R^7 together are an optionally methyl- or ethyl-substituted C_3-C_6-alkylene radical, in which optionally a carbon atom is replaced by oxygen or sulphur.

7. Suspension concentrates according to Claim 1, comprising compounds of the formula (I') in which

V is oxygen or N-D,

W is hydrogen, methyl, ethyl, chlorine, bromine or methoxy,

X is chlorine, bromine, methyl, ethyl, propyl, isopropyl, methoxy, ethoxy or trifluoromethyl,

Y and Z are independently of one another hydrogen, fluorine, chlorine, bromine, methyl, ethyl, propyl, isopropyl, trifluoromethyl or methoxy,

A is methyl, ethyl, propyl, isopropyl, butyl, isobutyl, sec-butyl, tert-butyl, cyclopropyl, cyclopentyl or cyclohexyl,

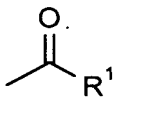
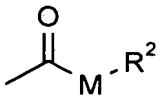
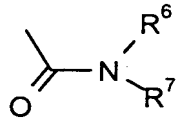
B is hydrogen, methyl or ethyl,

A, B and the carbon atom to which they are attached are saturated C_6-cycloalkyl, in which optionally a ring member is replaced by oxygen, and which is optionally monosubstituted by methyl, ethyl, trifluoromethyl, methoxy, ethoxy, propoxy or butoxy,

D is hydrogen, is methyl, ethyl, propyl, isopropyl, butyl, isobutyl, allyl, cyclopropyl, cyclopentyl or cyclohexyl,

A and D are together optionally methyl-substituted C_3-C_4-alkanediyl,

G is hydrogen (a) or is one of the groups

 (b),  (c), or  (g),

in which

M is oxygen or sulphur,

R^1 is C_1-C_8-alkyl, C_2-C_4-alkenyl, methoxymethyl, ethoxymethyl, methylthiomethyl, ethylthiomethyl, cyclopropyl, cyclopentyl or cyclohexyl,

is phenyl, optionally mono- or disubstituted by fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, methoxy, trifluoromethyl or trifluoromethoxy,

is in each case pyridyl or thienyl, optionally mono- or disubstituted by chlorine or methyl,

R^2 is C_1-C_8-alkyl, C_2-C_4-alkenyl, methoxyethyl, ethoxyethyl or is phenyl or benzyl,

R^6 and R^7 are independently of one another methyl, ethyl or together are a C_5-alkylene radical in which the C_3-methylene group is replaced by oxygen.

8. Suspension concentrates according to Claim 1, comprising compounds of the formula (I') in which

V is N-D,

W is hydrogen or methyl,

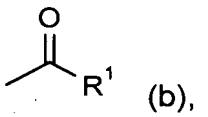
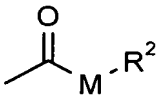
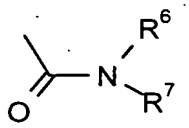
X is chlorine, bromine or methyl,

Y and Z are independently of one another hydrogen, chlorine, bromine or methyl,

A, B and the carbon atom to which they are attached are saturated C_6-cycloalkyl, in which optionally a ring member is replaced by oxygen, and which is optionally monosubstituted by methyl, trifluoromethyl, methoxy, ethoxy, propoxy or butoxy,

D is hydrogen,

G is hydrogen (a) or is one of the groups

 (b),  (c), or  (g),

in which

M is oxygen or sulphur,

R^1 is C_1-C_8-alkyl, C_2-C_4-alkenyl, methoxymethyl, ethoxymethyl, methylthiomethyl, ethyl, cyclopropyl, cyclopentyl, cyclohexyl or

is phenyl, optionally monosubstituted by fluorine, chlorine, bromine, methyl, methoxy, trifluoromethyl, trifluoromethoxy, cyano or nitro,

is in each case pyridyl or thienyl, optionally monosubstituted by chlorine or methyl,

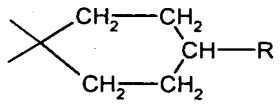
R^2 is C_1-C_8-alkyl, C_2-C_4-alkenyl, methoxyethyl, ethoxyethyl, phenyl or benzyl,

R^6 and R^7 are independently of one another methyl, ethyl or together are a C_5-alkylene radical, in which the C_3-methylene group is replaced by oxygen.

9. Suspension concentrates according to Claim 1, comprising compounds of the formula (I') in which

V is N-H,

A and B together with the carbon atom to which they are attached are a substituted six-membered ring



and the substituents W, X, Y, Z, G and R have the definitions indicated in the table:

W	X	Y	Z	R	G
H	Br	5-CH_3	H	OCH_3	CO-i-C_3H_7
H	Br	5-CH_3	H	OCH_3	CO_2-C_2H_5
H	CH_3	5-CH_3	H	OCH_3	H
H	CH_3	5-CH_3	H	OCH_3	CO_2-C_2H_5
CH_3	CH_3	3-Br	H	OCH_3	H
CH_3	CH_3	3-Cl	H	OCH_3	H

H	Br	4-CH_3	5-CH_3	OCH_3	CO-i-C_3H_7
H	CH_3	4-Cl	5-CH_3	OCH_3	$CO_2C_2H_5$
CH_3	CH_3	3-CH_3	4-CH_3	OCH_3	H
CH_3	CH_3	3-Br	H	OC_2H_5	CO-i-C_3H_7
H	CH_3	4-CH_3	5-CH_3	OC_2H_5	CO-n-C_3H_7
H	CH_3	4-CH_3	5-CH_3	OC_2H_5	CO-i-C_3H_7
H	CH_3	4-CH_3	5-CH_3	OC_2H_5	CO-c-C_3H_5

10. Suspension concentrates according to Claim 1, characterized in that as penetrant there is at least one alkanol alkoxylate of the formula (I) present

$$R\text{-}O\text{-}(\text{-}AO)_m\text{-}R' \qquad (I)$$

in which

R is straight-chain or branched alkyl having 4 to 20 carbon atoms,

R' is methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, t-butyl, n-pentyl or n-hexyl,

AO is an ethylene oxide radical, a propylene oxide radical, a butylene oxide radical or mixtures of ethylene oxide and propylene oxide radicals or mixtures of ethylene oxide and butylene oxide radicals, and

m stands for numbers from 2 to 30.

11. Suspension concentrates according to Claim 1, characterized in that as penetrant there is at least one compound of the formula (Ia) present

$$R\text{-}O\text{-}(\text{-}EO\text{-})_n\text{-}R' \qquad (Ia)$$

in which

R and R' have the definitions indicated above,

EO is $-CH_2-CH_2-O-$ and

n stands for numbers from 2 to 20.

12. Suspension concentrates according to Claim 1, characterized in that as penetrant there is at least one compound of the formula (Ib) present

$$R-O-(-EO-)_p-(-PO-)_q-R' \qquad (Ib)$$

in which

R and R' have the definitions indicated above,

EO is CH_2-CH_2-O-,

PO is $-CH_2-\underset{\displaystyle CH_3}{\underset{|}{CH}}-O-$,

p stands for numbers from 1 to 10 and

q stands for numbers from 1 to 10.

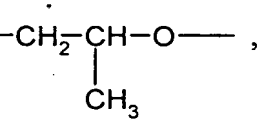
13. Suspension concentrates according to Claim 1, characterized in that as penetrant there is at least one compound of the formula (Ic) present

$$R-O-(-PO-)_r-(-EO-)_s-R' \qquad (Ic)$$

in which

R and R' have the definitions indicated above,

EO is CH_2-CH_2-O-,

PO is  ,

r stands for numbers from 1 to 10 and

s stands for numbers from 1 to 10.

14. Suspension concentrates according to Claim 1, characterized in that as penetrant there is the compound of the formula (Id) present

$$CH_3\text{-}(CH_2)_t\text{-}CH_2\text{-}O\text{-}(\text{-}CH_2\text{-}CH_2\text{-}O\text{-})_u\text{-}CH_3 \qquad (Id)$$

in which

t stands for numbers from 8 to 13

and

u stands for numbers from 6 to 17.

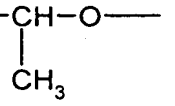
15. Suspension concentrates according to Claim 1, characterized in that as penetrant there is the compound of the formula (Ie) present

$$R\text{-}O\text{-}(\text{-}EO\text{-})_p\text{-}(\text{-}BO\text{-})_q\text{-}R' \qquad (Ie)$$

in which

R and R' have the definitions indicated above,

EO is CH_2-CH_2-O-,

BO is  ,

p stands for numbers from 1 to 10 and

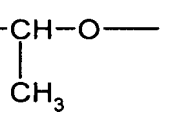
q stands for numbers from 1 to 10.

16. Suspension concentrates according to Claim 1, characterized in that as penetrant there is the compound of the formula (If) present

$$R\text{-}O\text{-}(\text{-}BO\text{-})_r\text{-}(\text{-}EO\text{-})_s\text{-}R' \qquad \text{(If)}$$

in which

R and R' have the definitions indicated above,

BO is  ,

EO is CH_2-CH_2-O-,

r stands for numbers from 1 to 10 and

s stands for numbers from 1 to 10.

17. Suspension concentrates according to Claim 10, 11, 12, 13, 15 and 16, in which

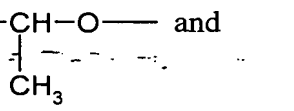
R is butyl, isobutyl, n-pentyl, isopentyl, neopentyl, n-hexyl, isohexyl, n-octyl, isooctyl, 2-ethylhexyl, nonyl, isononyl, decyl, n-dodecyl, isododecyl, lauryl, myristyl, isotridecyl, trimethylnonyl, palmityl, stearyl or eicosyl.

18. Suspension concentrates according to Claim 1, characterized in that as penetrant there is the compound of the formula (Ie-1) present

$$CH_3\text{-}(CH_2)_{10}\text{-}O\text{-}(\text{-}EO\text{-})_6\text{-}(\text{-}BO\text{-})_2\text{-}CH_3 \qquad \text{(Ie-1)}$$

in which

EO is $CH_2\text{-}CH_2\text{-}O\text{-}$,

BO is  and

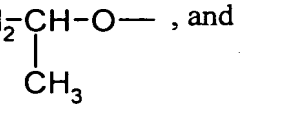
the numbers 6 and 2 represent average values.

19. Suspension concentrates according to Claim 1, characterized in that as penetrant there is the compound of the formula (Ie-2) present

$$CH_3\text{-}(CH_2)_8\text{-}O\text{-}(\text{-}EO\text{-})_8\text{-}(\text{-}BO\text{-})_2\text{-}CH_3 \qquad \text{(Ie-2)}$$

in which

EO is $CH_2\text{-}CH_2\text{-}O\text{-}$,

BO is  , and

the numbers 8 and 2 represent average values.

20. Suspension concentrates according to Claim 1, characterized in that sunflower oil, rapeseed oil, olive oil, corn oil and/or soya-bean oil is present as vegetable oil.

21. Suspension concentrates according to Claim 1, characterized in that the amount

- of active agrochemical substances is between 5% and 30% by weight,
- of "closed" penetrant is between 5% and 30% by weight,
- of vegetable oil or mineral oil is between 20% and 55% by weight,
- of surfactants is between 2.5% and 30% by weight, and
- of additives is between 0% and 25% by weight.

22. Process for producing suspension concentrates according to Claim 1, characterized in that

- at least one room-temperature-solid active agrochemical substance,
- at least one "closed" penetrant,
- at least one vegetable oil or mineral oil,
- at least one nonionic surfactant and/or at least one anionic surfactant, and
- optionally one or more additives from the groups of the emulsifiers, foam inhibitors, preservatives, antioxidants, colorants and/or inert filler materials

are mixed with one another and the resulting suspension is optionally subsequently ground.

23. Use of suspension concentrates according to Claim 1 for applying the active agrochemical substances comprised to plants and/or their habitat.

24. Compositions characterized by the presence of a suspension concentrate according to Claim 1 and of extenders and/or surface-active reagents.

25. Use of suspension concentrates according to Claim 1 for controlling insects.